

# Fire Weather Annual Report for 2008

Great Falls, Montana Weather Forecast Office



Prepared by: Bob Hoenisch, Fire Weather Program Manager/IMET, WFO Great Falls, MT

## **Weather Summary**

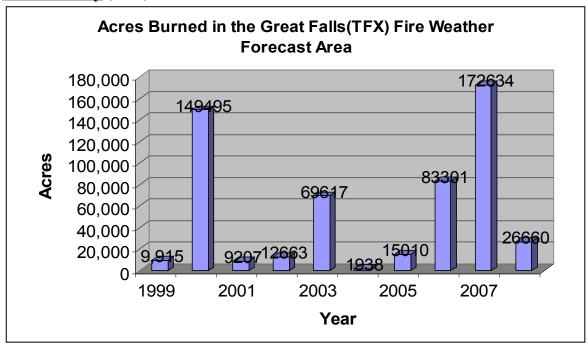
2008 was a relatively quiet fire season for the Northern Rockies geographic area including the TFX fire weather forecast area. An above normal snowpack was present in the mountains from late winter through the spring months. March through April was relatively dry across much of the region but cooler than normal temperatures helped maintain the mountain snowpack through this period. Cooler than average conditions continued through early June which also helped prolong the release of the mountain snowpack into the early summer months. May into early June were typically wet months with an extended period of precipitation in late May across much of central MT. June brought the typical drying of conditions by the end of the month with precipitation transitioning to more convective and scattered in nature by the beginning of July. July and August temperatures averaged near to slightly above normal across the region, however this was drastically cooler than recent years. Many locations failed to reach 100 degrees at all this summer, but many days over 90 degrees were recorded by summers end. Precipitation was near to slightly below normal as well, however there were no prolonged periods without even light precipitation as was the case in 2007. The combined effect of late season snowpack on high elevation fuels and the lack of extreme temperatures in July and August and the timely periods of albeit light precipitation combined to make the 2008 fire season one of the lightest in recent years.

## **Fire Activity**

The first Red Flag event of the season occurred in late March during a brief period of significantly above normal temperatures and strong winds. Several grassland fires were started with one of the larger fires spreading into the south Moccasin mountains north of Lewistown. This fire required multi-agency assistance for its suppression, spanning across private, state and BLM lands. 2 large incidents occurred each in July and August for a total of 5 large incidents in the forecast area in 2008. The largest incidents of the summer were the 743 acre Russian Flats fire on the Lewis and Clark National Forest and the 755 acre Bear Gulch fire on the Helena National Forest, both of which were assigned type 2 incident management teams at some point. Multiple Spot forecasts and phone briefings were provided daily to these incidents as well as other smaller incidents during the months of July and August.

		Wildfire Acres Burned	
Bureau of Indian Affairs	Blackfeet Agency	415	
	Ft. Belknap Agency	1148	
	Rocky Boy's Agency	2015	
BLM	*Lewistown Field Office	706	
US Fish and Wildlife	Benton Lake NWR	0	
Private	Great Falls Dispatch	771	
	Helena Dispatch	220	
	*Lewistown Dispatch	19199	
State	Central Land Office	537	
USDA Forest Service	Helena NF	715	
	Lewis and Clark NF	934	
	Total	26660	
*some acreage in these units may fall in the Glasgow WFO Fire Weather Area			

#### Fire Activity (cont.)



Data compiled from Northern Rockies GACC yearly summaries by unit.

## **Outreach and Liaison Activities**

Fire weather outreach activities continue to be busy for the Great Falls Forecast Office. Three separate weekly conference calls were held with various county, state and federal customers starting in June and continuing through September. These conference calls focused on determining fire restrictions for the upcoming week. In addition to the weekly conference calls, daily web briefings for land management customers were initiated in early July and continued through August. These briefings were shared with the Billings forecast office, utilizing go-to meeting software and including graphics produced using the FX-Collaborate program. Pre-season meetings were held with all major land management agencies in the forecast area. There were no requests for S-290 instruction in 2008.

## **Spot Forecasts**

Type of Spot	Number of Spots	Average Turnaround Time
Prescription	79	23.0
Wildfire	101	23.7
Wildfire Use	0	
Search and Rescue	3	14.0
Hazmat	0	
Training/Test	0	
Total	183	23.3

# **Red Flag Warning Verification Statistics**

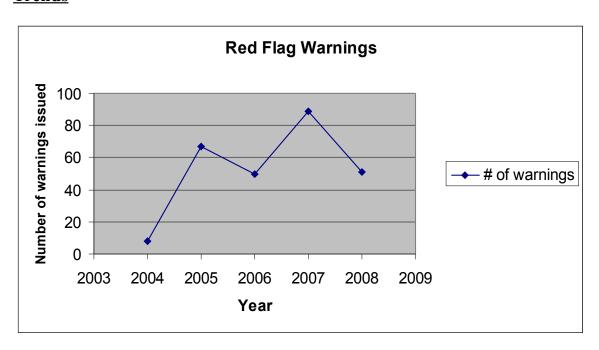
2008 Red Flag Warning Totals			
Total # of Warnings	51	POD	0.96
Total # of Events	50	FAR	0.06
Verified Warnings	48	CSI	0.91
Missed Warnings	2	Average Lead Time (Min)	578.48
Unverified Warnings	3	Average Lead Time (Hrs)	9.64
Watches issued	32		
Verified Watches	30		
Warnings Preceded by Watches	23		

2008 Red Flag Warning Synoptic Totals			
Total # of Warnings	32	POD	0.97
Total # of Events	32	FAR	0.03
Verified Warnings	31	CSI	0.94
Missed Warnings	1	Average Lead Time (Min)	785.59
Unverified Warnings	1	Average Lead Time (Hrs)	13.09
Watches Issued	18		
Warnings Preceded by Watches	16		

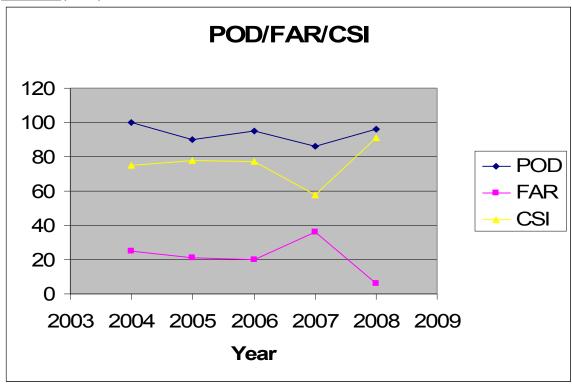
2008 Red Flag Warnin	g Dry	T-Storm Totals	
Total # of Warnings	7	POD	1.00
Total # of Events	7	FAR	0.00
Verified Warnings	7	CSI	1.00
Missed Warnings	0	Average Lead Time (Min)	548.57
Unverified Warnings	0	Average Lead Time (Hrs)	9.14
Watches Issued	7		
Warnings Preceded by Watches	7		

<sup>12</sup> days with Red Flag Events

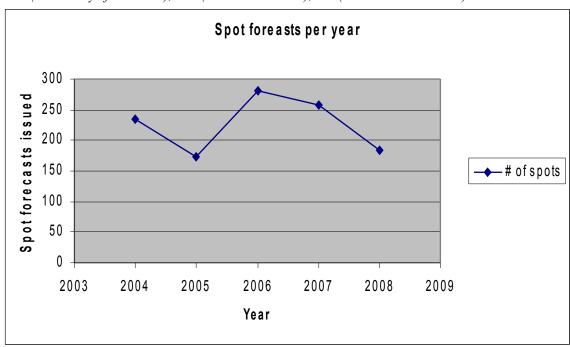
## **Trends**



## Trends (cont.)



POD (Probability of Detection), FAR (False Alarm Ratio), CSI (Critical Success Index)



## **I-MET Dispatches**

Name	Days out	Dates	FWA	Name of Fire
Bob Hoenisch	14	7/19-8/01	MFR	Siskiyou Fire
				Complex
				Klamath NF

Zero IMET dispatches occurred in the Great Falls FWA in 2008.

## Classes taught and Training/Liaison/Outreach

Jonathan Suk became assistant fire weather focal point in October 2008 and has begun necessary training.

#### Classes taught

No requests were made for S-290 or S-390 course instruction in 2008

#### **Training/Liaison/Outreach**

Completed pre-coursework for S-491(Intermediate NFDRS) 01/2008

Bob Hoenisch

Half hour TV interview with KRTV for "Face the State" episode titled: "Fire Season, Past, Present and Future". This was a 30 minute feature with the host interviewing myself and a USFS district ranger.

1/29/2008

**Bob Hoenisch** 

IMET Workshop. NWS (Boise, MT) 03/17/08-03/21/08 Bob Hoenisch

Central MT Fire Zone Preseason Fire Meeting BLM, dispatchers and cooperating USFS districts (Lewistown, MT) 03/25/08
Bob Hoenisch

Media interview with KRTV TV on Fire season outlook and what an IMET does. 04/1/2008

Bob Hoenisch

TFX Constituents Day Presented information to customers on Fire Weather Program 4/14/08 Bob Hoenisch

Media Interview with KFBB-TV on Red Flag Conditions and fire season outlook 04/14/08
Bob Hoenisch

Fire Weather refresher presentation given to WFO staff 04/2008

Media interview with Great Falls Tribune newspaper on fire season outlook for 2008. 04/28/08
Bob Hoenisch

#### **Training/Liaison/Outreach** (cont.)

Fire Weather Customer Meeting with the Lewis & Clark Forest Service BLM, USFS, and Various County Representatives (Great Falls, MT) 5/21/08
Bob Hoenisch

Media Interview with KFBB-TV on spring precipitation and snowpack impacts on the upcoming fire season. 06/08/08

Interagency Preseason Fire Management/Line Officers Meeting Helena National Forest and DNRC (Helena, MT) 6/27/08
Dan Reilly

Northern Rockies AOP Meeting. NWS (Billings, MT) 10/06/08-10/07/08 Bob Hoenisch/Jonathan Suk/Michael Mercer

## **Customer feedback**

**Bob Hoenisch** 

"Thanks for the heads up. Also, I wanted to thank you and your staff for the great job they have been doing with our spot wx forecasts and willingness to answer questions over the phone. We have pretty narrow windows of opportunities with our burning and we need as much information as we can from you guys. Appreciate it!"

Matt Plagenz - AFMO Judith RD, Lewis & Clark NF